Document 00003S

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SUPPLEMENTARY SPECIFICATIONS

END OF DOCUMENT

Section 02082 S

PRECAST CONCRETE MANHOLES

The following supplements modify Section 02082 – Precast Concrete Manholes Standard Specification and Details. Where a portion of the Specification or Detail is modified or deleted by this Supplementary Specification, the unaltered portions of the Specification and Detail shall remain in effect.

3.10 BACKFILL: Delete paragraph A and replace with the following paragraph A.

A. Place and compact backfill materials in area of excavation surrounding manholes in accordance with requirements of Section 02317 - Excavation and Backfill for Utilities.

DETAIL 2082-02: Delete sentence Number 9 under NOTES.

DETAIL 2082-03: Delete sentence Number 10 under NOTES.

DETAIL 2082-08: Delete sentence Number 3 under NOTES.

END OF SUPPLEMENT

John J. Sakolosky, P.E.
Senior Assistant Director
Engineering, Construction & Real Estate Division

2/20/03
Date

Section 02316 S

EXCAVATION AND BACKFILL FOR STRUCTURES

The following supplements modify Section 02316 – Excavation and Backfill for Structures Standard Specification. Where a portion of the Specification is modified or deleted by this Supplementary Specification, the unaltered portions of the Specification shall remain in effect.

1.03 DEFINITIONS: Delete paragraph D and replace with the following paragraph D.

D. Backfill: Material meeting specified quality requirements, placed and compacted under controlled conditions around structures.

3.08 BACKFILL: Delete paragraph A and replace with the following paragraph A.

A. Complete backfill to surface of natural ground or to lines and grades shown on Drawings. Remove forms, lumber, trash and debris from structures.

1. Unless otherwise shown on Drawings, for structures under pavement or within one foot back of curb, use cement stabilized sand up to pavement base or subgrade.

2. Unless otherwise shown on Drawings, for structures not under pavement, use cement stabilized sand to within 2 feet of final grade. Use Random backfill of suitable material for top two feet.

END OF SUPPLEMENT

John J. Sakolosky, P.E.
Senior Assistant Director
Engineering, Construction & Real Estate Division

2/20/03
Date

Section 02317 S

EXCAVATION AND BACKFILL FOR UTILITIES

The following supplements modify Section 02317 - Excavation and Backfill for Utilities Standard Specification. Where a portion of the Specification is modified or deleted by this Supplementary Specification, the unaltered portions of the Specification shall remain in effect.

1.02 MEASUREMENT AND PAYMENT: Delete paragraph A3 and replace with the following:

A. Unit Prices.

3. No additional payment will be made for performing Critical Location exploratory excavation. Include cost in unit price for installed underground piping, sewer, conduit, or duct work.

1.03 DEFINITIONS: Delete paragraph H and replace with the following:

H. Suitable Material: Suitable soil materials are those meeting specification requirements. Materials mixed with lime, fly ash, or cement that can be compacted to required density and meeting requirements for suitable materials may be considered suitable materials, unless otherwise indicated.

2.02 MATERIAL CLASSIFICATIONS: Delete paragraphs A and replace with the following and delete paragraph E entirely.

A. Embedment and Trench Zone Backfill Materials: Conform to classifications and product descriptions of Section 02320 - Utility Backfill Materials and Section 2321 – Cement Stabilized Sand

3.01 STANDARD PRACTICE: Delete paragraph C.

3.05 EXCAVATION: Delete paragraph C and replace with the following:

C. Determine trench excavation widths using following schedule as related to pipe outside diameter (O.D.).

Nominal Pipe Size, Inches	**Minimum Trench Width, Inches**
Less than 18	O.D. + 18
18 to 30	O.D. + 24
Over 30	O.D. + 36

3.08 TRENCH FOUNDATION: Delete paragraph C and replace with the following:

C. Perform over excavation, when directed by Project Manager, in accordance with Paragraph 3.08B above.

3.10 TRENCH ZONE BACKFILL PLACEMENT AND COMPACTION: Delete paragraphs B, C, E, F and G and replace with the following:

B. For water lines, under pavement and to within one foot back of curb, use backfill materials described by trench limits.

1. For water lines 20 inches in diameter and smaller use bank run sand or select backfill materials up to pavement base or subgrade.

2. For water lines 24 inches in diameter and larger, backfill with suitable on-site material (random backfill) up to 12 inches below pavement base or subgrade. Place minimum of 12 inches of select backfill below pavement base or subgrade.

C. For sewer pipes under pavement and to within one foot back of curb, use backfill materials described by trench limits.

1. For sewer pipes 36 inches in diameter and smaller use cement stabilized sand up to pavement base or subgrade.

2. For sewer pipes 42 inches in diameter and larger, backfill with suitable on-site material (random backfill) up to 12 inches below pavement base or subgrade. Place minimum of 12 inches of select backfill below pavement base or subgrade.

E. Where shown on the Drawings, remove unsuitable material from the site and backfill with suitable material.

F. Unless otherwise shown on Drawings, use one of the following trench zone backfills under pavement and to within one foot of edge of pavement. Place trench zone backfill in lifts and compact. Fully compact each lift before placement of next lift.

1. Class I, II, or III or combination thereof:

a. Place in maximum 12-inch thick loose layers.

b. Compact by vibratory equipment to minimum of 95 percent of maximum dry density determined according to ASTM D 698.

c. Moisture content within zero percent to +5 percent of optimum determined according to ASTM D 698, unless otherwise approved by Project Manager.

2. Cement-Stabilized Sand:

a. Maximum lift thickness determined by Contractor to achieve uniform placement and required compaction, but do not exceed 12 inches.

b. Compact by vibratory equipment to minimum of 95 percent of maximum dry density determined according to ASTM D 558.

c. Moisture content on dry side of optimum determined according to ASTM D 558 but sufficient for cement hydration.

3. Class IVA and IVB (Clay Soils):

a. Place in maximum 8-inch thick loose lifts.

b. Compact by vibratory Sheepfoot Roller to minimum of 95 percent of maximum dry density determined according to ASTM D 698.

c. Moisture content within zero percent to +5 percent above optimum determined according to ASTM D 698, unless approved by Project Manager.

G. Unless otherwise shown on Drawings, for trench excavations not under pavement, random backfill of suitable material may be used in trench zone.

1. Class IVA and IVB (Clay Soils) may be used as trench zone backfill outside paved areas.

2. Place in maximum 12-inch thick loose lift.

3. Compaction by appropriate equipment to minimum of 90 percent of maximum dry density determined according to ASTM D 698.

4. Moisture content as necessary to achieve density.

3.11 MANHOLES, JUNCTION BOXES AND OTHER PIPELINE STRUCTURES: Delete paragraphs A, B and C; replace with the following:

Encapsulate manhole, junction box and other pipeline structures with cement stabilized sand; minimum of 1 foot below base, minimum 1 foot around walls, up to within 12 inches of pavement subgrade. Compact in accordance with Paragraph 3.10.F.2 of this Section.

END OF SUPPLEMENT

John J. Sakolosky, P.E.
Senior Assistant Director
Engineering, Construction & Real Estate Division

2/20/03
Date

Section 02318 S

EXTRA UNIT PRICE WORK FOR EXCAVATION AND BACKFILL

The following supplements modify Section 02318 – Extra Unit Price Work for Excavation and Backfill Standard Specification. Where a portion of the Specification is modified or deleted by this Supplementary Specification, the unaltered portions of the Specification shall remain in effect.

1.02 UNIT PRICES: Delete paragraph F and add the following paragraphs F and G.

F. Extra Select Backfill: Payment for extra select backfill is on cubic yard basis, measured in place for a theoretical minimum trench width. The Project Manager may authorize extra select backfill when soil from the excavation work does not include adequate quantities for placement of suitable on-site material (random backfill).

G. Refer to Section 01270 - Measurement and Payment for unit price procedures.

1.03 DEFINITIONS: Add the following paragraph F.

F. Extra Select Backfill: Unsuitable material removed from the project and select backfill material hauled to the project, or conditioning unsuitable material on the site to make it select backfill. Provide select backfill material specified in Section 02320 - Utility Backfill Material.

END OF SUPPLEMENT

J J Sakolosky

John J. Sakolosky, P.E.
Senior Assistant Director
Engineering, Construction & Real Estate Division

2/20/03
Date

Section 02520-S

FIRE HYDRANTS

The following supplements modify Section 02520 - Fire Hydrants Standard Specification. Where a portion of the Specification is modified or deleted by this Supplementary Specification, the unaltered portions of the Specification shall remain in effect.

1.03 REFERENCES: Add the following paragraph and reletter remaining paragraphs accordingly:

"A. AWWA C 502 - Standard for Dry Barrel Fire Hydrants (Latest Edition)".

2.01 HYDRANTS: Delete paragraph 2.01.A and replace with the following:

"A. Provide hydrants in conformance with AWWA C 502, Standard for Dry Barrel Fire Hydrants (Latest Edition). Hydrants are approved by the City by issuance of a Certificate of Responsibility. The following hydrants are currently approved. Alternate hydrants will not be considered."

HYDRANT	ENGINEERING CONTROL DRAWING
Centurion A423 Option 110 (Super Centurion 250)	FH-70 Rev. A dated 03/06/97
Metropolitan 250	960324 Rev. A dated 02/25/97
Clow - 5 1/4" Medallion	D-20454 Rev. J dated 02/97 D-20455 Rev. H dated 02/97
American Darling B84B	94-20052 Rev. B dated 06/20/00 and 94-20051 dated 10/26/94
Kennedy - Guardian K81A	81257 Rev. 3 dated 12/97

2.03 HYDRANT PAINTING: Replace paragraphs under 2.03.B and 2.03.C as shown below and replace paragraphs 2.03.D, 2.03.E and 2.03.E.1 with paragraphs shown below:

B. Exterior Above Traffic Flange (Including Bolts and Nuts): Delete paragraphs 2.03.B.1 and 2.03.B.3 replace with the following:

"1. Surface preparation to be in accordance with SSPC-SP 10 (NACE 2) near white blast cleaned surface.

3. Colors - Primer: Manufacturers standard color. Finish coat of hydrant body: ACRO 555 Crystal Blue or equivalent. Connection caps: Finished coated white. Paint white band of finish coat two inches in width on hydrant body approximately six inches

above and parallel to traffic flange. Intermediate coat: Contrasting color to blue finish, such as white."

C. Field Maintenance Painting (Exterior Above Traffic Flange): Delete paragraph 2.03.C.2 and replace with the following:

"2. When surface is cleaned to bare metal (SSPC - SP11), coat hydrant with three coat Alkyd/Silicone Alkyd system in accordance with Paragraph 2.03.B.2 as for new hydrants. When surface is cleaned to SSPC - SP2 or SSPC - SP3, coat hydrant with Silicone Alkyd Resin Enamel in general conformance with SSPC Paint Specification No. 21. Total dry film thickness of 3 - 6 mils."

"D. Exterior Below Traffic Flange (Including lower barrel extensions)"

"E. Interior Surfaces Above and Below Water Line Valve (Including lower barrel extensions)

1. Material used for internal coating of hydrant interior ferrous surfaces must be NSF certified as suitable for contact with potable water as required by Chapter 290, Rules and Regulations for Public Water Systems, Texas Natural Resources Conservation Commission."

Approved by:

J. Sakolosky 8/14/03

John Sakolosky, P.E. Date
Senior Assistant Director
Engineering, Construction and Real Estate Division

END OF SUPPLEMENT

Section 02631 S

STORM SEWERS

The following supplements modify Section 02631 – Storm Sewers Standard Specification. Where a portion of the Specification is modified or deleted by this Supplementary Specification, the unaltered portions of the Specification shall remain in effect.

3.03 PIPE INSTALLATION: *Delete item number 1.under paragraph J. and replace with the following paragraph item number1.*

1. Minimum depth of cover from top of pavement to top of pipe shall be **2-feet**

END OF SUPPLEMENT

Approved by:

Leonard Washington, P.E.
Chief Engineer
Engineering, Construction & Real Estate Division

Date 2/7/03